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Confidence Levels Among UK Emergency Medicine Doctors In Performing Emergency Lateral Canthotomy: Should It Be A Key Skill In The ED?

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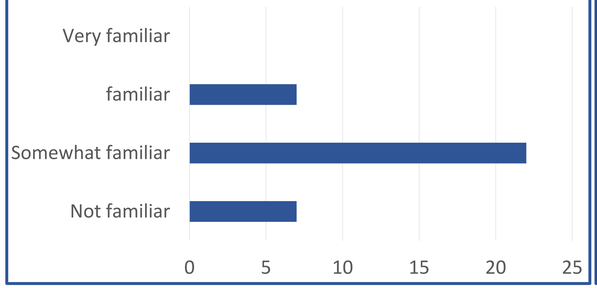
Introduction

Orbital compartment syndrome (OCS) is a sight threatening Ophthalmologic emergency caused by rapidly increasing intraorbital pressure. It is usually caused by a retrobulbar haemorrhage as a result of trauma. If not treated in a timely manner, permanent vision loss can occur. Lateral canthotomy and cantholysis is a minor procedure that can be performed bedside with equipment available in the emergency department. The aim of the procedure is to release the attachments between the suspensory ligaments of the eye and bony orbital wall, leading to a decrease in intraorbital pressure and prevent irreversible loss of vision. As most Ophthalmologists across the UK provide non-resident on-call service, this may lead to a delay in treatment of OCS and stresses the need for Emergency medical staff to be able to provide this sight-saving procedure independently.

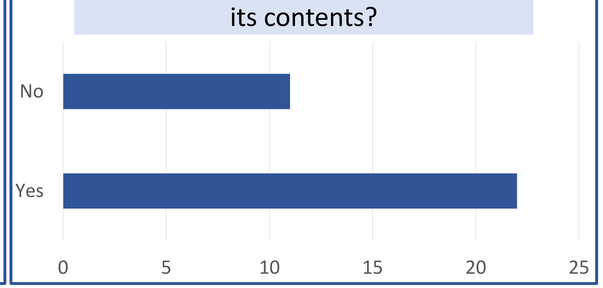
Methods

To survey current training, experience, and confidence levels among Emergency Medicine doctors in the peninsula region in performing emergency lateral canthotomy, and to establish whether these variables change following teaching from experienced ophthalmologists.

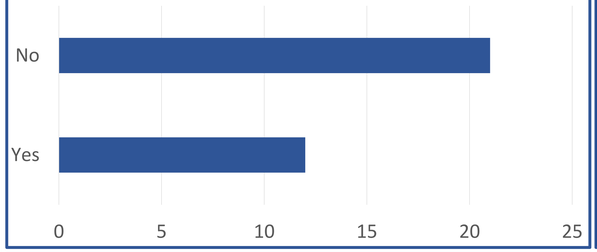
How familiar are you with the anatomy of the lateral canthus?



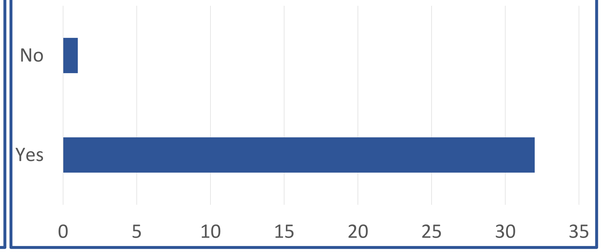
Have you ever had teaching/training where lateral canthotomy was a part of its contents?



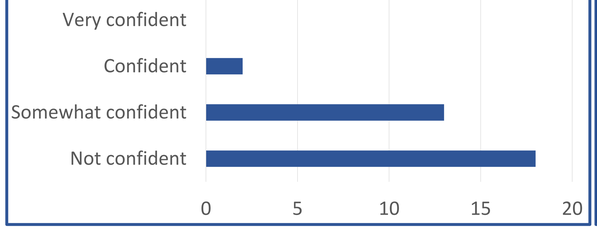
Have you faced a case where a lateral canthotomy procedure was indicated before?



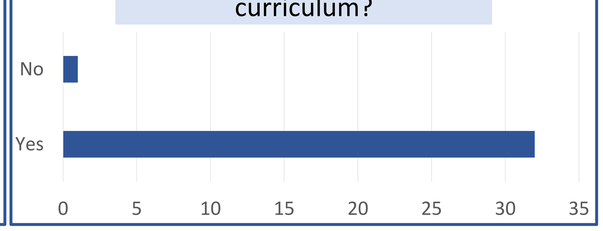
Do you feel having teaching/training has helped increase your confidence in performing lateral canthotomy?



How confident do you feel about performing a lateral canthotomy independently?



Do you think lateral canthotomy training should be part of the emergency medicine training curriculum?



Results

33 trainees participated in the survey. All of them were ST3-6 registrars. Only 5 registrars had performed emergency lateral canthotomy and cantholysis prior to the teaching, whereas most Emergency Medicine registrars had little to no experience in performing the procedure. The majority of them showed a significant increase in their confidence to perform the procedure following ophthalmic-led teaching. The survey also showed that the registrars felt such training should be part of the EM curriculum.

Conclusion

The involvement of Ophthalmologists in the teaching of Emergency Medicine doctors to recognise and treat Orbital compartment syndrome independently may prevent delay in treatment and reduce the risk of permanent sight loss. This project showed potential in improving patient care and will lead to a National Survey of Emergency Medicine doctors across the UK.

References

Turgut B, Karanfil FC, Turgut FA. Orbital Compartment Syndrome. Beyoglu Eye J. 2019 Feb 12;4(1):1-4. doi: 10.14744/bej.2018.70288. PMID: 35187423; PMCID: PMC8842040.